

CLAIMS

1. Colour cathode ray tube, comprising:

- a rectangular front face (10),
- a rectangular-shaped colour selection mask (9) defined by two axes of symmetry, the horizontal major axis X and the vertical minor axis Y intersecting at the centre of an active surface (19) perforated with orifices, the said active surface being surrounded by a peripheral border (28) and by a skirt lying in a direction Z substantially perpendicular to the active surface,
- a rectangular frame secured to the skirt of the mask by welding,

characterized in that in a direction parallel to the major axis, the mean radius of curvature R_{se} of the active surface of the mask is greater than the mean radius of curvature R_{bp} of the peripheral border.

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2. Colour cathode-ray tube according to Claim 1, characterized in that the outer surface of the front face (10) is substantially flat.

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3. Colour cathode-ray tube according to Claim 2, characterized in that along the major axis, the mean radius of curvature R_{se} of the active surface of the mask is at least 10 times greater than the mean radius of curvature R_{bp} of the peripheral border.

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4. Colour cathode-ray tube according to Claim 2, characterized in that the front face of the tube has a diagonal greater than 63 cm and in that along the major axis, the ratio between the mean radius of curvature R_{se} of the active surface of the mask and the mean radius of curvature R_{bp} of the peripheral border is such that:

$$0.01 < R_{bp}/R_{se} < 0.05.$$

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5. Cathode-ray tube according to Claim 1, characterized in that the radius of curvature changes continuously at the boundary between the active surface and the peripheral border.

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6. Colour cathode-ray tube according to the preceding claim, characterized in that, in a direction parallel to the major axis, at the boundary between the active surface of the mask and the peripheral border, the slopes

of the tangents to the surface of the mask on the side of the active surface and peripheral border are equal.

7. Cathode-ray tube according to Claim 1, characterized in that
5 the mean radius of curvature of the peripheral border in a direction parallel to
the major axis is smaller at the corners of the frame than at the major axis.

8. Cathode-ray tube according to Claim 2, characterized in that
the mean radius of curvature R_{se} along the major axis is greater than 3000
10 mm.